

BRANDT ET AL.

"Reselection Optimization in Mobile Wireless
Communication Devices And Methods Therefor"
Atty. Docket No. CS20456RL

Appl. No. 10/074,970
Confirm. No. 6905
Examiner L. West
Art Unit 2682

REMARKS

Request for Reconsideration, Informal Matters, Claims Pending

5 The Official action mailed on 9 July 2003 has been considered carefully. Reconsideration of the claimed invention in view of the amendments above and the discussion below is respectfully requested.

10 Claims 2 and 3 have been amended to provide proper antecedence for "... performing prior signal measurements" The amendments do not change the scope of said claims.

Claims 1-20 are pending.

Allowability of Claims Over Nuefeld

15 Claims 1-14 stand rejected under 35 USC 102(e) as being anticipated by U.S. Patent No. 6,278,703 (Nuefeld). Official Action, 9 July 2003, para. 2.

Discussion of Patentability of Independent Claim 1

Regarding Claim 1, contrary to the Examiner's assertion, Nuefeld does not disclose a method in a mobile wireless communication device, comprising

25 receiving present paging information;

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performing present signal measurements while receiving
the present paging information;

performing present reselection processing on prior signal
measurements while performing present signal measurements.

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Nuefeld discloses processing signal search results (neighbor cell
signal measurements) after the RF power period has ended. Nuelfeld, col. 6,
lines 50-54. Nuelfeld postpones signal processing until after the RF power
period to prevent the need for search throttling, i.e., limiting the number
and/or signal search rate due to processor overload during the RF power
period. Nuefeld, col. 5, lines 29-37 & col. 7, lines 12-22. In Claim 1, at least
some of the reselection processing occurs while performing signal
measurements, i.e., while the radio is energized. Claim 1 covers the
overlapping signal measurement and processing illustrated in exemplary FIG.
4 of the instant patent application. Claim 1 and the claims that depend
therefrom are thus patentably distinguished over Nuefled.

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Discussion of Patentability of Claim 2

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Regarding Claim 2, contrary to the Examiner's assertion, Nuefeld
does not disclose "... performing the prior signal measurements while
receiving prior paging information before receiving the present paging
information" in combination with the limitations of Claim 1. In Claims 1 & 2,
the current processing is performed on signal measurements obtained in a
prior measurement period. Claims 1 and 2 cover the process exemplified in
FIG. 2 wherein measurements made at (230) are processed at (252) while new

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measurements are made at (240). Claim 2 is thus further patentably distinguished over Nuefeld.

Discussion of Patentability of Claim 3

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Regarding Claim 3, contrary to the Examiner's assertion, Nuefeld does not disclose "... reducing power consumption by performing the present reselection processing on the prior signal measurements while receiving the present paging information, performing the prior signal measurements while receiving prior paging information before receiving the present paging information" in combination with the limitations of Claim 1 and any intervening claims. Nuefeld does not perform reselection processing on prior signal measurements while obtaining present signal measurements. Claim 3 is thus further patentably distinguished over Nuefeld.

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Discussion of Patentability of Claim 4

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Regarding Claim 4, contrary to the Examiner's assertion, Nuefeld does not disclose "... reducing power consumption by performing the present reselection processing, based upon the prior signal measurements, and receiving the present paging information in a substantially overlapping time period" in combination with the limitations of Claim 1 and any intervening claims. Claim 4 is thus further patentably distinguished over Nuefeld.

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Discussion of Patentability of Claim 5

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5 Regarding Claim 5, contrary to the Examiner's assertion, Nuefeld does not disclose "... entering a minimal power consumption mode while not receiving paging information and not performing signal measurements and not performing reselection processing" in combination with the limitations of Claim 1. Nuefeld discloses the performance of signal processing when not performing signal measurements, and thus Nuefeld cannot enter minimal power consumption mode while not performing signal measurements. Claim 5 is thus further patentably distinguished over Nuefeld.

10 Discussion of Patentability of Claim 6

15 Regarding Claim 6, contrary to the Examiner's assertion, Nuefeld does not disclose "... maximizing minimal power consumption mode operation by performing the reselection processing while substantially concurrently receiving the paging information" in combination with the limitations of Claim 1 and any intervening claims. Nuefeld discloses the performance of signal processing when not performing signal measurements, and thus Nuefeld cannot enter minimal power consumption mode while not performing signal measurements. Claim 6 is thus further patentably 20 distinguished over Nuefeld.

Discussion of Patentability of Claim 7

25 Regarding Claim 7, contrary to the Examiner's assertion, Nuefeld does not disclose "... receiving present paging information, performing present signal measurements, and performing reselection processing while

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operating the wireless communication device in idle mode" in combination with the limitations of Claim 1 and any intervening claims. Claim 7 is thus further patentably distinguished over Nuefeld.

5 Discussion of Patentability of Independent Claim 8

Regarding Claim 8, contrary to the Examiner's assertion, Nuefeld does not disclose a "... method in a mobile wireless communication device that receives paging information and performs neighbor signal measurements, comprising"

10 receiving present paging information;
 performing present signal measurements while receiving the present paging information;
15 performing reselection processing while receiving present paging information;
 reducing power consumption by performing the reselection processing on prior signal measurements performed while receiving prior paging information.

20 As noted above, Nuefeld discloses processing signal search results (neighbor cell signal measurements) after the RF power period has ended. Nuefeld, col. 6, lines 50-54. Also, Nuefeld concedes that postponing processing until after the RF power period increases power consumption, but contends that any increase in power consumption will be offset by power savings resulting from the avoidance of link maintenance conditions. Nuefeld, col. 8, lines 51-57. Claim 8 and the claims that depend therefrom are thus patentably distinguished over Nuefeld.

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Discussion of Patentability of Claim 9

Regarding Claim 9, contrary to the Examiner's assertion, Nuefeld does not disclose "... entering a minimal power consumption mode when not receiving paging information and not performing signal measurements and not performing reselection processing" in combination with the limitations of Claim 8. Nuefeld discloses the performance of signal processing when not performing signal measurements, and thus Nuefeld does not and cannot enter minimal power consumption mode while not performing signal measurements. Claim 9 is thus further patentably distinguished over Nuefeld.

Discussion of Patentability of Claim 10

Regarding Claim 10, contrary to the Examiner's assertion, Nuefeld does not disclose "... maximizing minimal power consumption mode operation by performing the reselection processing while substantially concurrently receiving the paging information" in combination with the limitations of Claim 8. Nuefeld discloses the performance of signal processing when not performing signal measurements, and thus Nuefeld cannot meet the limitations of Claim 10. Claim 10 is thus further patentably distinguished over Nuefeld.

Discussion of Patentability of Claim 11

Regarding Claim 11, contrary to the Examiner's assertion, Nuefeld does not disclose "... receiving present paging information, performing

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present signal measurements, and performing reselection processing while operating the wireless communication device in idle mode" in combination with the limitations of Claim 8 and any intervening claims. Claim 11 is thus further patentably distinguished over Nuefeld.

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Discussion of Patentability of Independent Claim 12

Regarding Claim 12, contrary to the Examiner's assertion, Nuefeld does not disclose a "... method in a wireless communication device, comprising"

...receiving periodic paging information;
performing periodic signal measurements;
performing periodic reselection processing;
reducing power consumption by receiving at least a portion of the periodic paging information concurrently with performing at least a portion of the periodic signal measurements and performing at least a portion of the periodic reselection processing.

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As noted above, Nuefeld does not perform signal processing until after the RF power period, i.e., after the obtaining signal measurements. Thus Nuefeld does not and cannot meet the "concurrently" limitation of Claim 12. Claim 12 is thus patentably distinguished over Nuefeld.

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Discussion of Patentability of Claim 13

Regarding Claim 13, contrary to the Examiner's assertion, Nuefeld does not disclose "... performing present reselection processing on prior signal

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5 measurements while performing present signal measurements" in combination with the limitations of Claim 12. As noted, Nuefeld does not perform reselection processing on prior signal measurements at the same time present signal measurements are obtained. Claim 13 is thus further patentably distinguished over Nuefeld.

Discussion of Patentability of Claim 14

10 Regarding Claim 14, contrary to the Examiner's assertion, Nuefeld does not disclose "... operating in a minimal power consumption mode when not receiving periodic paging information and not performing periodic signal measurements and not performing periodic reselection processing" in combination with the limitations of Claim 12. Nuefeld discloses the performance of signal processing when not performing signal measurements, and thus Nuefeld cannot enter minimal power consumption mode while not performing signal measurements. Claim 14 is thus further patentably 15 distinguished over Nuefeld.

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Allowability of Claims Over Nuefeld & Wang

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Claims 15-20 stand rejected under 35 USC 103(a) as being unpatentable over Nuefeld in view of U.S. Patent No. 6,480,504 (Wang). Official Action, 9 July 2003, para. 4. The Examiner concedes that Nuefeld does not disclose TDMA but relies upon Wang to satisfy the TDMA limitations.

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Discussion of Patentability of Independent Claim 15

Regarding Claim 15, contrary to the Examiner's assertion, Nuefeld does not disclose a "... method in a TDMA wireless communication device that receives periodic paging blocks and performs periodic neighbor signal measurements, comprising"

... receiving a present paging block;
10 performing present neighbor cell signal strength measurements while receiving the present paging block;
performing reselection processing for prior neighbor cell signal strength measurements while receiving the present paging block and performing the present neighbor cell signal strength measurements.

15 Nuefeld discloses processing signal search results (neighbor cell signal measurements) after the RF power period has ended. Nuelfeld, col. 6, lines 50-54. Nuelfeld postpones signal processing until after the RF power period to prevent the need for search throttling, i.e., limiting the number and/or signal search rate due to processor overload during the RF power period. Nuesfeld, col. 5, lines 29-37 & col. 7, lines 12-22. Wang is not relied upon to meet any other than the TDMA limitations. Claim 15 and the claims that depend therefrom are thus patentably distinguished over Nuefled and Wang.

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Discussion of Patentability of Claim 16

Regarding Claim 16, contrary to the Examiner's assertion, Nuefeld does not disclose "... reducing power consumption by operating in a minimal power consumption mode when not receiving periodic paging blocks and not performing periodic neighbor cell signal strength measurements and not performing reselection processing" in combination with the limitations of Claim 15. Nuefeld does not perform reselection processing on prior signal measurements while obtaining present signal measurements. Claim 16 is thus further patentably distinguished over Nuefeld.

Discussion of Patentability of Claim 17

Regarding Claim 17, contrary to the Examiner's assertion, Nuefeld does not disclose "... reducing power consumption by receiving at least a portion of the periodic paging blocks, performing at least a portion of the periodic neighbor cell signal strength measurements, and performing at least a portion of the reselection processing concurrently" in combination with the limitations of Claim 15 and any intervening claims. Nuefeld does not perform reselection processing and obtain present signal measurements concurrently. Claim 17 is thus further patentably distinguished over Nuefeld.

Discussion of Patentability of Independent Claim 18

Regarding Claim 18, contrary to the Examiner's assertion, Nuefeld does not disclose a "... method in a WCDMA wireless communication device

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that receives periodic paging indicator channel blocks and performs periodic reselection processing, comprising"

5 ... receiving a present paging indicator channel block;
 performing present signal measurements while receiving
 the present paging indicator channel block;
 performing reselection processing for prior signal
 measurements while receiving the present paging indicator
 channel block and performing the present signal measurements.

10 Nuefeld discloses processing signal search results (neighbor cell
 signal measurements) after the RF power period has ended. Nuelfeld, col. 6,
 lines 50-54. Nuelfeld postpones signal processing until after the RF power
 period to prevent the need for search throttling, i.e., limiting the number
 and/or signal search rate due to processor overload during the RF power
 period. Nuefeld, col. 5, lines 29-37 & col. 7, lines 12-22. Wang is not relied
 upon to meet any other than the TDMA limitations. Claim 18 and the claims
 that depend therefrom are thus patentably distinguished over Nuefled and
 Wang.

20 Discussion of Patentability of Claim 19

25 Regarding Claim 19, contrary to the Examiner's assertion, Nuefeld
 does not disclose "... reducing power consumption by operating in a minimal
 power consumption mode when not receiving periodic paging indicator blocks
 and when not performing periodic signal measurements and not performing
 reselection processing" in combination with the limitations of Claim 19.
 Nuefeld does not perform reselection processing on prior signal measurements

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while obtaining present signal measurements. Claim 19 is thus further patentably distinguished over Nuefeld.

Discussion of Patentability of Claim 20

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Regarding Claim 20, contrary to the Examiner's assertion, Nuefeld does not disclose "... performing signal measurements between receiving periodic paging indicator blocks when the period between the periodic paging indicator blocks is greater than a predetermined period" in combination with the limitations of Claim 15 and any intervening claims. Nuefeld does not perform reselection processing and obtain present signal measurements concurrently. Claim 20 is thus further patentably distinguished over Nuefeld.

Prayer For Relief

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In view of any amendments and the discussion above, the Claims of the present application are in condition for allowance. Kindly withdraw any rejections and objections and allow this application to issue as a United States Patent without further delay.

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The Examiner is encouraged to contact the undersigned upon carefully reviewing the foregoing amendment and discussion, prior to preparing an official action in response thereto.

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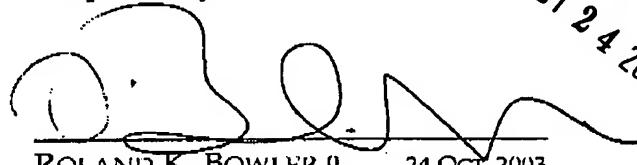
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5

Respectfully submitted,



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